

We claim:

- 1 1. An ankle gapping device comprising:
2 a lower leg engaging apparatus;
3 a foot engaging apparatus; and
4 a biasing member disposed between said lower leg engaging apparatus and said foot
5 engaging apparatus to bias said lower leg engaging apparatus and said foot
6 engaging apparatus away from each other.
- 1 2. An ankle gapping device according to Claim 1, wherein said biasing member is
2 pneumatic.
- 1 3. An ankle gapping device according to Claim 2, further comprising an air pump
2 coupled to provide compressed air to said pneumatic biasing member.
- 1 4. An ankle gapping device according to Claim 2, wherein said biasing member includes
2 an inflatable tube.
- 1 5. An ankle gapping device according to Claim 4, wherein said inflatable tube is shaped
2 as a sectioned torus.
- 1 6. An ankle gapping device according to Claim 4, wherein said inflatable tube is adapted
2 to generally surround an ankle, and includes a break to facilitate positioning around said ankle.
- 1 7. An ankle gapping device according to Claim 1, wherein said foot engaging apparatus
2 includes a receiving portion adapted to accept said biasing member.
- 1 8. An ankle gapping device according to Claim 7, wherein said receiving portion
2 includes a channel formed in a top portion of said foot engaging apparatus.

1 9. An ankle gapping device according to Claim 7, wherein said receiving portion is
2 substantially rigid.

1 10. An ankle gapping device according to Claim 1, wherein said foot engaging apparatus
2 comprises a first surface adapted about a dorsal portion of a foot.

1 11. An ankle gapping device according to Claim 10, wherein said foot engaging apparatus
2 comprises a second surface adapted to abut a heel.

1 12. An ankle gapping device according to Claim 11, wherein at least one of said first and
2 second surfaces is arched.

1 13. An ankle gapping device according to Claim 12, wherein both of said first and
2 second surfaces are arched.

1 14. An ankle gapping device according to Claim 11, wherein:
2 said first surface is on a first portion of said foot engaging apparatus;
3 said second surface is on a second portion of said foot engaging apparatus; and
4 said first portion of said foot engaging apparatus is flexibly coupled to said second
5 portion of said foot engaging apparatus.

1 15. An ankle gapping device according to Claim 14, further comprising a hinge
2 connecting said first portion of said foot engaging apparatus to said second portion of said foot
3 engaging apparatus.

1 16. An ankle gapping device according to Claim 14, comprising a securing device for
2 securing said first portion of said foot engaging apparatus to said second portion of said foot
3 engaging apparatus about said foot.

1 17. An ankle gapping device according to Claim 1, wherein said leg engaging apparatus
2 includes a receiving portion adapted to accept said biasing member.

1 18. An ankle gapping device according to Claim 17, wherein said receiving portion
2 includes a channel formed in a top portion of said leg engaging apparatus.

1 19. An ankle gapping device according to Claim 17, wherein said receiving portion is
2 rigid.

1 20. An ankle gapping device according to Claim 19, wherein said receiving portion is
2 flared sufficiently to contain a top portion of said biasing member.

1 21. An ankle gapping device according to Claim 1, wherein said leg engaging apparatus
2 is formed of material sufficiently rigid to transfer force exerted by said biasing member to a
3 lower leg of a user.

1 22. An ankle gapping device according to Claim 1, wherein said leg engaging apparatus
2 is tapered from an upper portion to a lower portion.

1 23. An ankle gapping device according to Claim 22, wherein said leg engaging apparatus
2 is contoured to conform a human lower leg.

1 24. An ankle gapping device according to Claim 1, wherein said leg engaging apparatus
2 is sectioned to facilitate application and removal.

1 25. An ankle gapping device according to Claim 24, wherein said leg engaging apparatus
2 includes at least two sections.

1 26. An ankle gapping device according to Claim 25, wherein said at least two sections
2 are flexibly coupled together.

1 27. An ankle gapping device according to Claim 26, wherein said at least two sections
2 are flexibly coupled together by a hinge.

1 28. An ankle gapping device according to Claim 26, further comprising a securing
2 member adapted to tightly secure said at least two sections about said leg.

1 29. An ankle gapping device according to Claim 28, wherein said securing member
2 comprises hook and loop fastener material.

1 30. An ankle gapping device according to Claim 25, wherein said leg engaging apparatus
2 comprises a semi rigid elastic wrap.

1 31. An ankle gapping device according to Claim 1, wherein:
2 said foot engaging device defines a seat formed to accept a bottom portion of said
3 biasing member; and
4 said leg engaging device defines a seat formed to accept a top portion of said biasing
5 member.

1 32. An ankle gapping device according to Claim 31, wherein said biasing member is an
2 inflatable tube.

1 33. An ankle gapping device according to Claim 1, wherein said biasing member is
2 capable of exerting a force sufficient to cause separation of an ankle joint.

1 34. An ankle gapping device according to Claim 1, wherein said lower leg engaging
2 apparatus comprises means for engaging the lower leg of a human being.

1 35. An ankle gapping device according to Claim 1, wherein said foot engaging apparatus
2 comprises means for engaging a human foot.

1 36. An ankle gapping device according to Claim 1, wherein said biasing member
2 comprises means for pushing said lower leg engaging apparatus and said foot engaging apparatus
3 apart from one another.

1 37. A method for gapping an ankle joint, comprising:
2 applying a foot engaging apparatus to a person's foot;
3 applying a leg engaging apparatus to the person's leg;
4 disposing a biasing member between said foot engaging apparatus and said leg
5 engaging apparatus; and
6 actuating said biasing member to urge said foot engaging apparatus and said leg
7 engaging apparatus apart from one another.

1 38. A method for gapping an ankle joint according to claim 37, wherein said step of
2 applying said foot engaging apparatus to said foot includes positioning a first portion of said foot
3 engaging apparatus on a dorsal side of said foot and positioning a second portion of said foot
4 engaging apparatus on a heel of said foot.

1 39. A method for gapping an ankle joint according to claim 37, wherein said step of
2 applying said leg engaging apparatus to said leg includes wrapping said leg engaging apparatus
3 around the lower leg.

1 40. A method for gapping an ankle joint according to claim 37, wherein said step of
2 disposing said biasing member between said foot engaging apparatus and said leg engaging
3 apparatus includes positioning an inflatable tube between said foot engaging apparatus and said
4 leg engaging apparatus.

1 41. A method for gapping an ankle joint according to claim 40, wherein said step of
2 actuating said biasing member includes pumping fluid into said inflatable tube.

1 42. An ankle gapping device comprising:
2 lower leg engaging means;
3 foot engaging means; and
4 means for pushing said lower leg engaging means and said foot engaging means in
5 opposite directions.